

Docket No. 2001-005-DSK

ABSTRACT OF THE DISCLOSURE

swp A24
5
10
15
20
APPARATUS AND METHOD FOR INSTANT COPY OF DATA

0984322-061001

A system is provided to support dynamically changeable virtual mapping schemes in a data processing system. The present invention separates processing of data unit requirements from the selection of which storage subsystems to use for storage by using a storage methodologies inventory. A stored data management subsystem contains one or more hosts. A plurality of data storage elements is functionally coupled to the one or more hosts. The plurality of data storage elements is organized using a plurality of layers of mapping tables. The plurality of layers of mapping tables provides unique identification of location of the data such that individual data entries in a mapping table is variable and self-defining with respect to the amount of data managed. In addition, the present system provides various instant copy mechanisms for copying data upon receiving a write operation to either a source or copy data. The instant copy mechanisms may be selected based on the type of mapping originally used to store the data that is to be copied.